

PUBLIC SERVICE COMMISSION OF WISCONSIN

Quadrennial Planning Process III

5-FE-101

FINAL DECISION

This is the Final Decision establishing a methodology for calculating avoided transmission and distribution (T&D) costs for the purpose of evaluating Focus on Energy (Focus), the frequency with which avoided T&D costs for the purpose of evaluating Focus shall be reviewed, the approach for incorporating avoided T&D costs as part of the evaluation of Quad III programs, and the direction to revisit avoided T&D costs in the Quad IV Planning Process.

Introduction

Wisconsin law requires the Commission to review energy efficiency and renewable resource programs every four years to evaluate Focus and set or revise goals, priorities, and measurable targets for the programs. Wis. Stat. § 196.374(3)(b)1.

The Commission's decisions in the first Quadrennial Planning process covered the 2011-2014 period (docket 5-GF-191). The Commission's decisions in the second Quadrennial Planning Process covered the 2015-2018 period (docket 5-FE-100). The Commission's decisions for the current Quadrennial period cover the period 2019-2022 (docket 5-FE-101).

Wisconsin Admin. Code § PSC 137.05(12) requires a third party, contracted by the Commission, to perform market assessment and evaluation activities necessary to measure the impacts and cost-effectiveness of Focus. A component of the evaluation of the cost-

effectiveness of Focus is the benefits realized through avoided energy and avoided electric capacity costs achieved when energy consumption and demand are reduced. In its Final Decision of June 6, 2018, the Commission established the bases for continuing to include avoided energy costs, avoided electric capacity costs, and avoided natural gas costs as part of the evaluation of programs during Quad III of Focus. ([PSC REF#: 343909.](#))

During the first Quadrennial Planning Process (Quad I), an Evaluation Work Group (EWG) was established to advise the Commission on Focus evaluation issues. The EWG consists of a Commission staff representative that serves as the chairperson of the Work Group, a representative from the Program Administrator, an Evaluation Contractor representative, a utility representative, and an industry expert representative. ([PSC REF#: 137129.](#)) Among the responsibilities of the EWG is to develop and recommend an appropriate method for valuing avoided energy costs. ([PSC REF#: 158228.](#)) Additionally, the Commission has directed the Evaluation Contractor to review avoided cost values annually and present the values to the EWG. ([PSC REF#: 390566.](#)) This annual review is to ensure that the benefits calculated as part of the evaluation of Focus do not get out of alignment with market realities, trends, and forecasts.

In its Final Decision of June 1, 2020, the Commission directed the EWG to propose to the Commission a method for calculating avoided T&D costs to be used for the purposes of evaluating Focus. ([PSC REF#: 390566.](#)) The Evaluation Contractor coordinated with the EWG to review other open PSC dockets to identify stakeholders to provide feedback on potential approaches, alternatives, available and recommended data sources, and key considerations for using and applying values for different T&D investments. After compiling this feedback, a recommended approach, summary of stakeholder input, and alternatives considered were

presented to the EWG by the Evaluation Contractor team. The EWG unanimously accepted an incremental cost approach and approved forwarding the recommendation to the Commission for consideration.

On January 20, 2021, the EWG submitted its recommendation to adopt an avoided T&D cost calculation method using an incremental cost approach based on a four-year running average of investor-owned utility (IOU) reported infrastructure investments. Additional EWG recommendations were also submitted and included: 1) pursuing modifications to the annual IOU reporting requirements to improve the ability to ascertain the applicability of T&D projects accounted for in the calculation, 2) reviewing avoided T&D costs annually, 3) incorporating avoided T&D costs into a parallel analysis of benefits achieved by Focus programs in Quad III, and 4) revisiting avoided T&D in the Quad IV Planning Process for Focus.

Findings of Fact

1. For the purposes of evaluating Focus, the EWG's recommended method for calculating avoided T&D costs is reasonable and in the public interest.
2. The EWG's recommendation to direct Commission staff to pursue modifications to the annual IOU reporting requirements to improve the ability to ascertain the applicability of T&D projects accounted for in the calculation is reasonable and in the public interest.
3. The EWG's recommendation that the Focus Evaluation Contractor review avoided T&D costs annually is reasonable and in the public interest.
4. The EWG's recommendation to incorporate avoided T&D costs into a parallel analysis of benefits achieved by Focus programs as part of evaluation of Quad III programs is reasonable and in the public interest.

5. Revisiting avoided T&D costs in the Quad IV Planning Process is reasonable and in the public interest.

Conclusions of Law

1. The Commission has jurisdiction under Wis. Stat. §§ 196.02, 196.374, and Wis. Admin. Code ch. PSC 137 to oversee and evaluate the statewide energy efficiency and renewable resource programs, and to set and revise the goals, priorities, budgets, measurable targets for Focus.

Opinion

Calculating the benefits of Focus for Wisconsin ratepayers requires an understanding of the costs that are avoided when energy consumption and demand are reduced. After assessing the alternative approaches and data sources to calculate avoided T&D costs, the EWG concluded that an incremental cost approach relying on data reported in IOU Annual Reports filed by utilities to the Public Service Commission of Wisconsin is consistent with approaches used in other jurisdictions and results in values that are in-line with expectations. Furthermore, the method aligns with the EWG's recommendations favoring an approach that maximizes reliance on publicly available data sources that are regularly and reliably updated, uses straightforward calculations based on standard engineering and economic principles, ensures regional specificity, and can be developed and updated efficiently.

The EWG's recommended steps in deriving the avoided T&D costs are as follows:

$$\text{Project } kVA * \text{Power Factor} = \text{Project } kW$$

$$\text{Project } kW * 8,760 = \text{Project } kW - \text{Year}$$

$$\text{Project Cost } (\$) \div \text{Project Miles} = \text{Cost per Mile}$$

$$\text{Cost per Mile} \div \text{Project } kW - \text{Year} = \text{Project Cost per Mile per } kW - \text{Year}$$

$$\text{Annualized Cost per Mile per } kW - \text{Year} = \frac{r * \text{Project Cost per Mile per } kW \text{ Year}}{1 - (1 + r)^{\text{Project } EUL}}$$

In order to reduce the year-to-year variability of the costs, a four-year running average of the total miles and the annualized cost per mile per kW-Year are multiplied to get the average cost per kW-Year. For projecting values in future years, this approach escalates the most recent average Midcontinent Independent System Operating (MISO) Cost of New Entry (CONE) value by a growth factor that takes into account inflation and construction costs. The growth factor is calculated by taking the four-year average of construction cost growth as determined by the Wisconsin Department of Transportation in the Chained Fisher Construction Cost Index, and subtracting inflation (U.S. Bureau of Labor Statistics Consumer Price Index, Midwest Region¹), over the same period.

The Commission determines that the EWG's recommended approach to calculate avoided T&D costs is appropriate and consistent with industry practices. The Commission finds it appropriate to direct Commission staff to pursue modifications to the annual IOU utility reporting requirements to improve the transparency and consistency of the data used to calculate avoided T&D costs for the purposes of evaluating Focus in Quad IV and future quadrennial

¹ Bureau of Labor Statistics Midwest CPI Summaries available here: <https://www.bls.gov/regions/midwest/cpi-summary/home.htm>

planning efforts. The Commission finds that the accounting for avoided T&D costs as a benefit for Focus will have a net positive impact despite limited situations in which renewable projects could result in negative avoided T&D costs. As such, the EWG recommended that avoided T&D costs should be on a project-by-project basis.

To maximize the benefits from calculating avoided T&D costs data, the Commission finds it reasonable for the Focus Evaluation Contractor to review avoided T&D costs annually and present the results of that review to the EWG. The Commission determines that an annual review of avoided T&D costs will help to maintain an understanding of how the values used for the purposes of evaluating Focus align with market realities, trends, and forecasts. This annual review enables the Commission to effectively utilize the avoided T&D costs data to determine Focus' benefits for Wisconsin ratepayers by providing an opportunity to assess data gaps and consider alternative approaches to maximize efficacy.

The Commission finds it reasonable for the Focus Evaluation Contractor to incorporate avoided T&D costs into a parallel analysis of benefits achieved by Focus programs as part of the evaluation of Quad III programs. The Commission determines that this approach will be useful in allowing for consistent comparisons with previous evaluations and will establish a baseline to which performance in future evaluations can be compared.

The Commission finds it reasonable to revisit avoided T&D costs as part of Quadrennial Planning Process IV of Focus.

Order

1. For the purposes of evaluating Focus for the Quad III period, an avoided T&D cost calculation method using an incremental cost approach based on a four-year running average of investor-owned utility reported infrastructure investments, is approved.

2. Commission staff shall pursue modifications to the annual investor-owned utility reporting requirements to improve the ability to ascertain the applicability of T&D projects accounted for in the T&D avoided cost calculation.

3. Avoided T&D cost values shall be reviewed by the Evaluation Contractor annually and presented to the EWG.

4. Avoided T&D costs shall be incorporated into a parallel analysis of benefits achieved by Focus programs as part of the evaluation of Quad III programs.

5. Avoided T&D costs shall be reviewed as part of the Quadrennial Planning Process IV.

6. Jurisdiction is retained.

Dissent

Commissioner Nowak dissents and writes separately.

Dated at Madison, Wisconsin, the 10th day of March, 2021.

By the Commission:

A handwritten signature in black ink that reads "Steffany Powell Coker". The signature is written in a cursive, flowing style.

Steffany Powell Coker
Secretary to the Commission
SP:pc DL:01785503
See attached Notice of Rights

PUBLIC SERVICE COMMISSION OF WISCONSIN
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**NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE
TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE
PARTY TO BE NAMED AS RESPONDENT**

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

PETITION FOR REHEARING

If this decision is an order following a contested case proceeding as defined in Wis. Stat. § 227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of the date of service of this decision, as provided in Wis. Stat. § 227.49. The date of service is shown on the first page. If there is no date on the first page, the date of service is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

PETITION FOR JUDICIAL REVIEW

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of the date of service of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of the date of service of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission serves its original decision.² The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: March 27, 2013

² See *Currier v. Wisconsin Dep't of Revenue*, 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.

PUBLIC SERVICE COMMISSION OF WISCONSIN

Quadrennial Planning Process III

5-FE-101

DISSENT OF COMMISSIONER ELLEN NOWAK

I write to dissent from the Commission's order to adopt a method for calculating avoided transmission and distribution capacity costs for purposes of evaluating Focus on Energy (Focus), docket 5-FE-101.

The Commission's adoption of a methodology for this purpose is premature and speculative. As a result, the risk of overstating the benefit of Focus is great and this could mislead the public about the efficacy of Focus' expenditure of ratepayer funds. The adoption of this methodology, combined with the Commission's previous approval of an updated method for calculating avoided capacity costs¹, is a troubling trend in how this Commission is overseeing the Focus program.

While the argument was advanced that including avoided transmission and distribution costs in evaluating Focus will allow for a more complete accounting of the benefits and enhance the ability to compare the benefits Focus delivers relative to programs in other states, that is simply not true. As noted in the comments by the Wisconsin Utilities Association (WUA)², the greatest driver in distribution costs is electric code requirements. Utilities do not have the luxury to assume that their customers will use less than their maximum designed service following a Focus supported project. Utilities cannot (and should not) plan for less distribution capacity as a customer load can vary with changes in electric use. This reality of how the distribution system

¹ See [PSC REF#: 390566](#). I dissented from this order as well.

² See [PSC REF#: 404251](#) for WUA's entire comments.

works and including avoided distribution costs will result in overstated benefits of Focus programs.

The argument that 38 entities used avoided transmission and distribution benefits in cost-effectiveness testing is not a reason for this Commission to follow suit. As the Commission staff memo notes, there are “significant differences” in the approaches to the calculation. In other words, there is no consensus on how to calculate avoided transmission and distribution costs yet this Commission is going to forge ahead with the method because other states do it. That is not a reason to adopt a policy. There is no industry best practice, there are data gaps and the Commission admittedly does not have adequate visibility into or consistent reporting on the data needed for the calculation of the avoided transmission and distribution costs. That should sound alarm bells to hit the pause button.

Given the lack of national consensus that would add value to a comparison, the most effective data in developing and tracking Wisconsin programs would be to maintain a consistent basis ‘apples to apples’ comparison from year to year within Focus. After all, our first goal is to utilize Wisconsin ratepayer dollars in the most effective way possible.

Furthermore, there is no evidence that the other 38 entities that calculate avoided transmission and distribution benefits have programs similar (or even substantially similar) to Wisconsin’s statewide Focus program. If the Commission adopted the additional methodology to compare our programs to other programs, then it should ensure that we will use the same methodology (we won’t) and apply it to a substantially similar program, which is unlikely. Wisconsin is unique in having a statewide program that includes incentives for both energy efficiency and renewables.

A final point of concern is the lack of discussion by the Commission about the scenario where renewable energy projects would result in *more* transmission and distribution (which has been referred to as a “negative transmission and distribution benefit”). The WUA also raised the point that the number of distributed energy resources such as solar photovoltaic are increasing and these DER’s often push the limits of the existing infrastructure. How this Commission will account for the impact of more renewables on the distribution system while also accounting for avoided transmission and distribution costs was unaddressed.

Wisconsin’s Focus program has enjoyed positive cost-benefit ratios for several years. Injecting speculative avoided costs into the calculation will only serve to falsely increase a ratio that can later be used in a press release and marketing for more ratepayer dollars.